Local symmetry, multi-body correlations and the cancellation effect
G. Tarjus, D. Kivelson and V. Friedrich (Los Angeles, CA, U.S.A.) 253
Microwave spectra and molecular conformation of methoxy difluorophosphinoxide
C.W. Gillies, L. Rickus, J.Z. Gillies and H. Justnes (Troy, NY, U.S.A.), R.D. Suenram and F.J. Lovas (Gaithersburg, MD, U.S.A.) and T. Diguiseppe (Newton Upper Falls, MA, U.S.A.) 273
The hydrogen-atom environment of the ether oxygen atom in crystal structures of some representative muscarinic agonists
J. Kroon, R.L. Scherrenberg, H. Kooijman and J.A. Kanters (Utrecht, The Netherlands) 287
Rotational and vibrational spectra, conformational stability, potential functions and ab initio calculations of methacryloyl chloride
J.R. Durig, P.A. Brletic, Y.S. Li, A.-Y. Wang and T.S. Little (Columbia, SC, U.S.A.) 291
A two-dimensional ring puckering potential energy surface for ethylene carbonate from ab initio and flexible model computations
A. Degli Esposti (Bologna, Italy), D.G. Lister (Sant' Agata di Messina, Italy) and P. Palmieri (Bologna, Italy) 325
Raman spectroscopic study of characteristic conformations of bipyridines adsorbed on active electrode surface
S. Oe and K. Fukushima (Shizuoka, Japan) 337
Triatomic molecules: meeting places for experiment and theory
F.R. Burden (Clayton, Vic., Australia) 345
Raman spectra and conformations of dibenzo- and dicyclohexano-18-crown-6
H. Takeuchi, T. Arai and I. Harada (Sendai, Japan) 335
Internal rotation and structure of β-butyrolactone: microwave and ab initio studies
E. González, J.C. López and J.L. Alonso (Valladolid, Spain) 365
Relaxation kinetics in gaseous Lewis acid/base systems: the prototype, $(CH_3)_2O + BF3 \leftrightharpoons (CH_3)_2O:BF3$
D.B. Borchardt, K. Saito and S.H. Bauer (Ithaca, NY, U.S.A.) 375
Structure and valence from complementary anomalous X-ray and neutron powder diffraction
G.H. Kwei, R.B. Von Dreele, A. Williams, J.A. Goldstone, A.C. Lawson II and W.K. Warburton (Los Alamos, NM, U.S.A.) 383
Applications of computer algebra to molecular spectroscopy
M.L. Sage (Syracuse, NY, U.S.A.) 407
Microwave spectrum and amino hydrogen location in 7-azaindole
W. Caminati, S. Di Bernardo and A. Trombetti (Bologna, Italy) 415
Optimal design of external fields for controlling molecular motion: application to rotation
R.S. Judson (Houston, TX, U.S.A.), K.K. Lehmann, H. Rabitz and W.S. Warren (Princeton, NJ, U.S.A.) 425
Microwave spectrum and structure of trifluoromethylgermane
J.F. Sullivan, C.M. Whang and J.R. Durig (Columbia, SC, U.S.A.), H. Bürger and R. Eujen (Wuppertal, F.R.G.) and S. Cradock (Edinburgh, Gt. Britain) 457
The structure of methyl fluoroformate from microwave spectroscopy and ab initio calculations
P. Groner, C.L. Tolley and J.R. Durig (Columbia, SC, U.S.A.) 471

Author index 481

Subject index 482